

**REMARKS/ARGUMENTS**

Claims 1-11 and 13-16 are pending in the present application. In the present Amendment, claims 1, 3, 4, 6, 8 and 14 have been amended and claims 2 and 5 have been canceled as being redundant. It is respectfully submitted that no new matter has been introduced into the present application by any of the amendments to the claims. Reconsideration of the present patent application is respectfully requested in view of the following remarks.

The Office Action dated July 15, 2004, identified the pending claims as being 1-14. Apparently, the Examiner has overlooked the First Preliminary Amendment that was filed with the present application. In this First Preliminary Amendment, claims 11, 13 and 14 were amended, claim 12 was canceled and new claims 15 and 16 were added. For the convenience of the Examiner, a copy of the First Preliminary Amendment is attached to this paper.

In the aforementioned Office Action, the Examiner has objected to claims 1-10 as containing non-elected subject matter. There is no outstanding rejection. Accordingly, it is believed that if claims 1-10 are amended to remove the non-elected subject matter, they will be in allowable condition.

In the present Amendment, claims 1-10 have been amended to remove the non-elected subject matter. Applicants reserve the right to pursue the non-elected subject matter in one or more divisional applications.

Claims 11 and 13-16 are method of use claims that depend, directly or indirectly, on claim 1. Accordingly, since claim 1 should now be in allowable condition, it is respectfully submitted that rejoinder of these method of use claims is now proper.

Applicant believes that no fee is due with this Amendment. However, if a fee is due, please charge our Deposit Account No. 03-2775, under Order No. 09879-00036 from which the undersigned is authorized to draw.

Dated: October 5, 2004

Respectfully submitted,

By 

William E. McShane  
Registration No.: 32,707  
CONNOLLY BOVE LODGE & HUTZ LLP  
P. O. Box 2207  
Wilmington, Delaware 19899-2207  
(302) 658-9141  
(302) 658-5614 (Fax)  
Attorney for Applicant

Enclosure: Copy of First Preliminary Amendment (filed on August 5, 2003)

359696



Docket No.: 09879-00036  
AGR-2002/M-221 (PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:  
Thomas Seitz et al.

Application No.: Not Yet Assigned

Art Unit: N/A

Filed: August 5, 2003

Examiner: Not Yet Assigned

For: 3-AMINOCARBONYL SUBSTITUTED  
BENZOYLPYRAZOLONES

MS Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**FIRST PRELIMINARY AMENDMENT**

Dear Sir:

**INTRODUCTORY COMMENTS**

Prior to examination on the merits, please amend the above-identified U.S. patent application as follows:

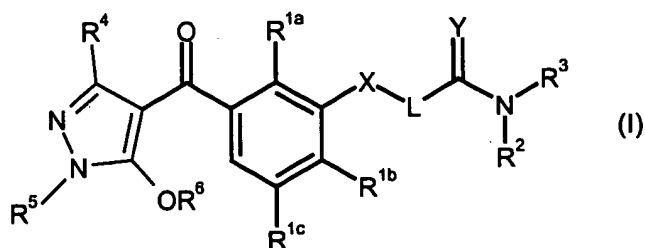
**Amendments to the Claims** are reflected in the listing of claims which begins on page 2 of this paper.

**Remarks/Arguments** begin on page 8 of this paper.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (original): A compound of the formula (I) or salt thereof



in which the radical and the indices have the following definitions:

X is O, S(O)<sub>n</sub>, N-H or N-R<sup>2</sup>;

L is a straight-chain or branched (C<sub>1</sub>-C<sub>6</sub>)-alkylene, (C<sub>2</sub>-C<sub>6</sub>)-alkenylene or (C<sub>2</sub>-C<sub>6</sub>)-alkynylene chain substituted by w radicals from the group consisting of halogen, cyano, and nitro and by v radicals R<sup>2</sup>;

Y is oxygen or sulfur;

R<sup>1a</sup>, R<sup>1b</sup>, R<sup>1c</sup> independently are each hydrogen, mercapto, nitro, halogen, cyano, thiocyanato,

(C<sub>1</sub>-C<sub>6</sub>)-alkyl-CO-O, (C<sub>1</sub>-C<sub>6</sub>)-alkyl-S(O)<sub>n</sub>-O, (C<sub>1</sub>-C<sub>6</sub>)-alkyl-S(O)<sub>m</sub>, (C<sub>1</sub>-C<sub>6</sub>)-haloalkyl-S(O)<sub>m</sub>, (C<sub>3</sub>-C<sub>7</sub>)-cycloalkyl-S(O)<sub>m</sub>, di-(C<sub>1</sub>-C<sub>6</sub>)-alkyl-N-SO<sub>2</sub>, (C<sub>1</sub>-C<sub>6</sub>)-alkyl-SO<sub>2</sub>-NH, (C<sub>1</sub>-C<sub>6</sub>)-alkyl-NH-CO, di-(C<sub>1</sub>-C<sub>6</sub>)-alkyl-N-CO, (C<sub>1</sub>-C<sub>6</sub>)-alkyl-SO<sub>2</sub>-[(C<sub>1</sub>-C<sub>6</sub>)-alkyl]amino, (C<sub>1</sub>-C<sub>6</sub>)-alkyl-CO-[(C<sub>1</sub>-C<sub>6</sub>)-alkyl]amino, (C<sub>1</sub>-C<sub>6</sub>)-alkyl-O-CH<sub>2</sub>, (C<sub>1</sub>-C<sub>6</sub>)-alkyl-S(O)<sub>n</sub>-CH<sub>2</sub>, (C<sub>1</sub>-C<sub>6</sub>)-alkyl-NH-CH<sub>2</sub>, 1,2,4-triazol-1-yl, 1,2,4-triazol-1-yl-CH<sub>2</sub>,

or are each (C<sub>1</sub>-C<sub>6</sub>)-alkyl-(Y)<sub>p</sub>, (C<sub>2</sub>-C<sub>6</sub>)-alkenyl-(Y)<sub>p</sub>, (C<sub>2</sub>-C<sub>6</sub>)-alkynyl-(Y)<sub>p</sub>,

(C<sub>3</sub>-C<sub>9</sub>)-cycloalkyl-(Y)<sub>p</sub>, (C<sub>3</sub>-C<sub>9</sub>)-cycloalkenyl-(Y)<sub>p</sub>, (C<sub>1</sub>-C<sub>6</sub>)-alkyl-(C<sub>3</sub>-C<sub>9</sub>)-cycloalkyl-(Y)<sub>p</sub> or (C<sub>1</sub>-C<sub>6</sub>)-alkyl-(C<sub>3</sub>-C<sub>9</sub>)-cycloalkenyl-(Y)<sub>p</sub> each of which is substituted by v radicals from the group consisting of cyano, nitro and halogen;

R<sup>2</sup>, R<sup>3</sup> independently are each hydrogen, (C<sub>1</sub>-C<sub>6</sub>)-alkyl, (C<sub>2</sub>-C<sub>6</sub>)-alkenyl, (C<sub>2</sub>-C<sub>6</sub>)-alkynyl, (C<sub>3</sub>-C<sub>9</sub>)-cycloalkyl, (C<sub>3</sub>-C<sub>9</sub>)-cycloalkenyl, (C<sub>1</sub>-C<sub>6</sub>)-alkyl-(C<sub>3</sub>-C<sub>9</sub>)-cycloalkyl, (C<sub>1</sub>-C<sub>6</sub>)-alkyl-(C<sub>3</sub>-C<sub>9</sub>)-cycloalkenyl, (C<sub>2</sub>-C<sub>6</sub>)-alkenyl-(C<sub>3</sub>-C<sub>9</sub>)-cycloalkyl, (C<sub>2</sub>-C<sub>6</sub>)-alkenyl-(C<sub>3</sub>-C<sub>9</sub>)-cycloalkenyl, (C<sub>2</sub>-C<sub>6</sub>)-alkynyl-(C<sub>3</sub>-C<sub>9</sub>)-cycloalkyl, (C<sub>2</sub>-C<sub>6</sub>)-alkynyl-(C<sub>3</sub>-C<sub>9</sub>)-cycloalkenyl, straight-chain or branched [O-C(R<sup>6</sup>)<sub>2</sub>]<sub>w</sub>-[O-C(R<sup>6</sup>)<sub>2</sub>]<sub>x</sub>-R<sup>6</sup>, (C<sub>1</sub>-C<sub>6</sub>)-alkyl-aryl, (C<sub>2</sub>-C<sub>6</sub>)-alkenyl-aryl, (C<sub>2</sub>-C<sub>6</sub>)-alkynyl-aryl, straight-chain or branched [O-C(R<sup>6</sup>)<sub>2</sub>]<sub>w</sub>-[O-C(R<sup>6</sup>)<sub>2</sub>]<sub>x</sub>-aryl, the last 16 of the abovementioned radicals being substituted by v radicals from the group consisting of cyano, nitro and halogen,

or are each aryl, heterocyclyl or heteroaryl each substituted by v radicals consisting of the group of cyano, nitro, halogen, (C<sub>1</sub>-C<sub>6</sub>)-alkyl-(Y)<sub>p</sub> and halo-(C<sub>1</sub>-C<sub>6</sub>)-alkyl-(Y)<sub>p</sub>,

or

R<sup>2</sup> and R<sup>3</sup> together with the nitrogen atom linking them form a 5- or 6-membered saturated, partly unsaturated or fully unsaturated ring which contains n heteroatoms from the group consisting of oxygen and nitrogen and is substituted by v radicals from the group consisting of cyano, nitro, halogen, (C<sub>1</sub>-C<sub>6</sub>)-alkyl-(Y)<sub>p</sub> and halo-(C<sub>1</sub>-C<sub>6</sub>)-alkyl-(Y)<sub>p</sub>,

or

R<sup>2</sup> and R<sup>3</sup> together with the nitrogen atom linking them form a ring from the group consisting of benzothiazole, benzoxazole, benzopyrazole and benzopyrrole which is substituted by v radicals from the group consisting of cyano, nitro, halogen, (C<sub>1</sub>-C<sub>6</sub>)-alkyl-(Y)<sub>p</sub>, and halo-(C<sub>1</sub>-C<sub>6</sub>)-alkyl-(Y)<sub>p</sub>;

R<sup>4</sup> is hydrogen, (C<sub>1</sub>-C<sub>6</sub>)-alkyl or (C<sub>1</sub>-C<sub>6</sub>)-haloalkyl, (C<sub>3</sub>-C<sub>9</sub>)-cycloalkyl or (C<sub>3</sub>-C<sub>9</sub>)-halocycloalkyl;

$R^5$  is (C<sub>1</sub>-C<sub>6</sub>)-alkyl, halo-(C<sub>1</sub>-C<sub>6</sub>)-alkyl, (C<sub>3</sub>-C<sub>9</sub>)-cycloalkyl, (C<sub>3</sub>-C<sub>9</sub>)-halo-cycloalkyl, or is phenyl substituted by v radicals from the group consisting of halogen, nitro, cyano, (C<sub>1</sub>-C<sub>4</sub>)-alkyl, halo-(C<sub>1</sub>-C<sub>4</sub>)-alkyl, (C<sub>1</sub>-C<sub>4</sub>)-alkoxy and halo-(C<sub>1</sub>-C<sub>4</sub>)-alkoxy;

$R^6$  is hydrogen, (C<sub>1</sub>-C<sub>6</sub>)-alkyl, halo-(C<sub>1</sub>-C<sub>6</sub>)-alkyl, (C<sub>1</sub>-C<sub>6</sub>)-alkylcarbonyl, halo-(C<sub>1</sub>-C<sub>6</sub>)-alkylcarbonyl, (C<sub>1</sub>-C<sub>6</sub>)-alkoxycarbonyl, halo-(C<sub>1</sub>-C<sub>6</sub>)-alkoxycarbonyl, (C<sub>1</sub>-C<sub>6</sub>)-alkylaminocarbonyl, halo-(C<sub>1</sub>-C<sub>6</sub>)-alkylaminocarbonyl, (C<sub>1</sub>-C<sub>6</sub>)-dialkylaminocarbonyl, halo-(C<sub>1</sub>-C<sub>6</sub>)-dialkylaminocarbonyl, (C<sub>1</sub>-C<sub>6</sub>)-alkylsulfonyl, halo-(C<sub>1</sub>-C<sub>6</sub>)-alkylsulfonyl, or is benzyl, benzoyl, benzoylmethyl, phenoxycarbonyl or phenylsulfonyl each of which is substituted by v radicals from the group consisting of halogen, nitro, cyano, (C<sub>1</sub>-C<sub>4</sub>)-alkyl, halo-(C<sub>1</sub>-C<sub>4</sub>)-alkyl, (C<sub>1</sub>-C<sub>4</sub>)-alkoxy and halo-(C<sub>1</sub>-C<sub>4</sub>)-alkoxy;

m is 1 or 2;

n is 0, 1 or 2;

p is 0 or 1;

v is 0, 1, 2 or 3;

w and x independently are each 0, 1, 2, 3 or 4;

w and x should not both be zero at the same time.

Claim 2 (original): A compound as claimed in claim 1, wherein

$R^2$ ,  $R^3$  independently are each hydrogen, (C<sub>1</sub>-C<sub>6</sub>)-alkyl, (C<sub>2</sub>-C<sub>6</sub>)-alkenyl, (C<sub>2</sub>-C<sub>6</sub>)-alkynyl, (C<sub>3</sub>-C<sub>9</sub>)-cycloalkyl, (C<sub>3</sub>-C<sub>9</sub>)-cycloalkenyl, (C<sub>1</sub>-C<sub>6</sub>)-alkyl-(C<sub>3</sub>-C<sub>9</sub>)-cycloalkyl, (C<sub>1</sub>-C<sub>6</sub>)-alkyl-(C<sub>3</sub>-C<sub>9</sub>)-cycloalkenyl, (C<sub>2</sub>-C<sub>6</sub>)-alkenyl-(C<sub>3</sub>-C<sub>9</sub>)-cycloalkyl, (C<sub>2</sub>-C<sub>6</sub>)-alkenyl-(C<sub>3</sub>-C<sub>9</sub>)-cycloalkenyl, (C<sub>2</sub>-C<sub>6</sub>)-alkynyl-(C<sub>3</sub>-C<sub>9</sub>)-cycloalkyl, (C<sub>2</sub>-C<sub>6</sub>)-alkynyl-(C<sub>3</sub>-C<sub>9</sub>)-cycloalkenyl, straight-chain or branched  $[O-C(R^6)_2]_w-[O-C(R^6)_2]_x-R^6$ , (C<sub>1</sub>-C<sub>6</sub>)-alkyl-aryl, (C<sub>2</sub>-C<sub>6</sub>)-alkenyl-aryl, (C<sub>2</sub>-C<sub>6</sub>)-alkynyl-aryl, straight-chain or branched  $[O-C(R^6)_2]_w-[O-C(R^6)_2]_x$ -aryl, the last 16 of the abovementioned radicals being substituted by the radicals consisting of cyano, nitro, and halogen, aryl substituted by v radicals from the group consisting of cyano, nitro, halogen, (C<sub>1</sub>-C<sub>6</sub>)-alkyl-(Y)<sub>p</sub> and halo-(C<sub>1</sub>-C<sub>6</sub>)-alkyl-(Y)<sub>p</sub>

or

$R^2$  and  $R^3$  together with the nitrogen atom linking them form a 5- or 6-membered saturated, partly unsaturated or fully unsaturated ring which contains  $n$  heteroatoms from the group consisting of oxygen and nitrogen and is substituted by  $v$  radicals from the group consisting of cyano, nitro, halogen,  $(C_1-C_6)$ -alkyl-(Y)<sub>p</sub> and halo-(C<sub>1</sub>-C<sub>6</sub>)-alkyl-(Y)<sub>p</sub>,

or

$R^2$  and  $R^3$  together with the hydrogen atom linking them form a ring from the group consisting of benzothiazole, benzoxazole, benzopyrazole and benzopyrrole which is substituted by  $v$  radicals from the group consisting of cyano, nitro, halogen,  $(C_1-C_6)$ -alkyl-(Y)<sub>p</sub> and halo-(C<sub>1</sub>-C<sub>6</sub>)-alkyl-(Y)<sub>p</sub>.

Claim 3 (original): A compound as claimed in claim 1, wherein Y is oxygen and  $R^{1c}$  is hydrogen.

Claim 4 (original): A compound as claimed in claim 1, wherein

X is O or S(O)<sub>n</sub>;

$R^{1a}$ ,  $R^{1b}$  independently are each F, Cl, Br, CH<sub>3</sub>, CH<sub>3</sub>S, CH<sub>3</sub>O, CH<sub>3</sub>SO<sub>2</sub>, C<sub>2</sub>H<sub>5</sub>SO<sub>2</sub>, CF<sub>3</sub>CH<sub>2</sub>SO<sub>2</sub>, cyclopropyl-SO<sub>2</sub>, CF<sub>3</sub> or NO<sub>2</sub>;

$R^2$ ,  $R^3$  independently are each hydrogen,  $(C_1-C_6)$ -alkyl,  $(C_2-C_6)$ -alkenyl,  $(C_2-C_6)$ -alkynyl,  $(C_3-C_9)$ -cycloalkyl,  $(C_1-C_6)$ -alkyl-(C<sub>3</sub>-C<sub>9</sub>)-cycloalkyl, the last 5 radicals being substituted by  $v$  radicals from the group consisting of cyano, nitro, and halogen, or are aryl or  $(C_1-C_6)$ -alkyl-aryl, the last 2 radicals being substituted by  $v$  radicals from the group consisting of cyano, nitro, halogen,  $(C_1-C_6)$ -alkyl-(Y)<sub>p</sub> and halo-(C<sub>1</sub>-C<sub>6</sub>)-alkyl-(Y)<sub>p</sub>, or  $R^2$  and  $R^3$  together with the nitrogen atom linking them form a 5- or 6-membered saturated, partly unsaturated or fully unsaturated ring which contains  $n$  heteroatoms from the group consisting of oxygen and nitrogen and is substituted by  $v$  radicals from the group consisting of cyano, nitro, halogen,  $(C_1-C_6)$ -alkyl-(Y)<sub>p</sub> and halo-(C<sub>1</sub>-C<sub>6</sub>)-alkyl-(Y)<sub>p</sub>,

or

$R^2$  and  $R^3$  together with the nitrogen atom linking them form a ring from the group consisting of benzothiazole, benzoxazole, benzopyrazole and benzopyrrole which is substituted by  $v$  radicals from the group consisting of cyano, nitro, halogen,  $(C_1-C_6)$ -alkyl- $(Y)_p$  and halo $(C_1-C_6)$ -alkyl- $(Y)_p$ .

Claim 5 (original): A compound as claimed in claim 1, wherein X is oxygen.

Claim 6 (original): A compound as claimed in claim 1, wherein

$R^2$ ,  $R^3$  independently are each hydrogen or  $(C_1-C_6)$ -alkyl,

or

$R^2$  and  $R^3$  together with the nitrogen atom linking them form a ring from the group consisting of morpholine, pyrrolidine, piperidine, pyrrole, pyrazole and 2,3-dihydroindole;  
 $R^4$  is hydrogen, methyl or cyclopropyl.

Claim 7 (original): A compound as claimed in claim 1, wherein

$R^6$  is hydrogen,  $(C_1-C_6)$ -alkyl,  $(C_1-C_6)$ -alkylcarbonyl,  $(C_1-C_6)$ -alkylsulfonyl, or is benzoyl or phenylsulfonyl each of which is substituted by  $v$  radicals from the group consisting of halogen, nitro, cyano,  $(C_1-C_4)$ -alkyl, halo- $(C_1-C_4)$ -alkyl,  $(C_1-C_4)$ -alkoxy and halo- $(C_1-C_4)$ -alkoxy.

Claim 8 (original): A compound as claimed in claim 1, wherein

L is  $CH_2$ ,  $C(CH_3)H$  or  $CH_2CH_2$ ;

$R^{1a}$ ,  $R^{1b}$  independently are each Cl, Br,  $NO_2$ ,  $CH_3$ ,  $CH_3SO_2$  or  $C_2H_5SO_2$ ;

$R^2$ ,  $R^3$  are each hydrogen or  $(C_1-C_6)$ -alkyl;

$R^5$  is methyl or ethyl.

Claim 9 (original): A herbicidal composition comprising a herbicidally effective amount of at least one compound of the general formula (I) as claimed in claim 1.



Claim 10 (original): A herbicidal composition as claimed in claim 9 in a mixture with formulating auxiliaries.

Claim 11 (currently amended): A method of controlling unwanted plants, which comprises applying an effective amount of at least one compound of the general formula (I) as claimed in claim 1 ~~or of a herbicidal composition as claimed in claim 9 or 10~~ to the plants or to the site of the unwanted plant growth.

Claim 12 (canceled).

Claim 13 (currently amended): The ~~[[use]]~~ method as claimed in claim ~~[[12]]~~ 11, wherein the unwanted plants are ~~compound of the general formula (I) is used to control unwanted plants~~ in crops of useful plants.

Claim 14 (currently amended): The ~~[[use]]~~ method as claimed in claim 13, wherein the useful plants are transgenic.

Claim 15 (new): A method of controlling unwanted plants, which comprises applying the herbicidal composition as claimed in claim 9 to the plants or to the site of the unwanted plant growth.

Claim 16 (new): A method of controlling unwanted plants, which comprises applying the herbicidal composition as claimed in claim 10 to the plants or to the site of the unwanted plant growth.

**REMARKS/ARGUMENTS**

In the present Amendment, claims 11, 13 and 14 have been amended and claim 12 has been canceled as being redundant. New claims 15 and 16 have been added. The pending claims after entry of this Amendment will be claims 1-11 and 13-16.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Applicant believes that no fee is due with this Amendment. However, if a fee is due, please charge our Deposit Account No. 03-2775, under Order No. 9879-36 from which the undersigned is authorized to draw.

Dated: August 5, 2003

Respectfully submitted,

By 

William E. McShane  
Registration No.: 32,707  
CONNOLLY BOVE LODGE & HUTZ LLP  
P. O. Box 2207  
Wilmington, Delaware 19899-2207  
(302) 658-9141  
(302) 658-5614 (Fax)  
Attorney for Applicant

278954